

United States Patent and Trademark Office



APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/497,836	02/03/2000	Victor S. Moore	BC9-99-044	7966	
2000	90 02/20/2007 IDDONE CLITATAN DA	EXAMINER NEURAUTER, GEORGE C			
& BIANCO P.L.					
•	MMERCE CENTER ST 77TH STREET, SUIT	ART UNIT	PAPER NUMBER		
BOCA RATON,		2143			
HORTENED STATUTORY	PERIOD OF RESPONSE	MAIL DATE	DELIVER	Y MODE	
3 MON	THS	02/20/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary		Applicat	Application No. Applicant(s)						
		09/497,8	336	MOORE ET AL.					
		Examine	er	Art Unit					
		George (C. Neurauter, Jr.	2143					
Period fo	The MAILING DATE of this communication	n appears on th	ne cover sheet with the c	orrespondence ad	ddress				
	• •			->					
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR RECHEVER IS LONGER, FROM THE MAILING Insions of time may be available under the provisions of 37 CF SIX (6) MONTHS from the mailing date of this communication of period for reply is specified above, the maximum statutory pure to reply within the set or extended period for reply will, by safety received by the Office later than three months after the red patent term adjustment. See 37 CFR 1.704(b).	G DATE OF T FR.1.136(a). In no e n. eriod will apply and s statute, cause the ap	HIS COMMUNICATION vent, however, may a reply be timwill expire SIX (6) MONTHS from polication to become ABANDONE	N. nely filed the mailing date of this c D (35 U.S.C. § 133).					
Status									
1)⊠	Responsive to communication(s) filed on 2	25 January 20	07.						
		This action is							
3)□	· · · · · · · · · · · · · · · · · · ·								
	closed in accordance with the practice und	der <i>Ex parte</i> Q	uayle, 1935 C.D. 11, 45	3 O.G. 213.					
Disposit	ion of Claims								
4)⊠	Claim(s) 1-21 is/are pending in the applica	ition.							
·	4a) Of the above claim(s) <u>5,10 and 15</u> is/are withdrawn from consideration.								
5)[Claim(s) is/are allowed.								
6)⊠	Claim(s) <u>1-4,6-9,11-14 and 16-21</u> is/are re	jected.							
7)	Claim(s) is/are objected to.								
8)□	Claim(s) are subject to restriction ar	nd/or election	requirement.						
Applicati	ion Papers								
9)	The specification is objected to by the Exar	miner.							
<i>'</i> —	The drawing(s) filed on is/are: a)) ☐ objected to by the E	Examiner.					
	Applicant may not request that any objection to	-							
	Replacement drawing sheet(s) including the co	rrection is requi	red if the drawing(s) is obj	ected to. See 37 C	FR 1.121(d).				
11)	The oath or declaration is objected to by the	e Examiner. N	ote the attached Office	Action or form P7	ΓΟ-152.				
Priority ι	under 35 U.S.C. § 119								
	Acknowledgment is made of a claim for fore ☐ All b)☐ Some * c)☐ None of:	eign priority ur	nder 35 U.S.C. § 119(a)	-(d) or (f).					
a) _l	1.☐ Certified copies of the priority docum	ante have he	en received						
	Certified copies of the priority docum Certified copies of the priority docum			on No					
	3. Copies of the certified copies of the				Stage				
	application from the International Bu	· •			9-				
* 5	See the attached detailed Office action for a			d.					
- Attachmen	tis)								
	e of References Cited (PTO-892)		4) Interview Summary	(PTO-413)					
2) 🔲 Notic	e of Draftsperson's Patent Drawing Review (PTO-948		Paper No(s)/Mail Da	te					
	nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date		5) Notice of Informal Page 6) Other:	atent Application					
Paper No(s)/Mail Date 6) Other:									

DETAILED ACTION

Claims 1-4, 6-9, 11-14, and 16-21 are currently presented and have been examined.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 25 January 2007 has been entered.

Response to Arguments

Applicant's arguments filed 25 January 2007 have been fully considered but they are not persuasive.

The Applicant argues that Miller does not teach or suggest a speed indication signal that comprises an indicated speed of transmission representing a maximum transmission rate to be used in transmitting a specified data item. The Examiner respectfully submits that this argument is not persuasive in view of the teachings of Miller.

Miller expressly discloses:

Art Unit: 2143

"In accordance with a sixth broad aspect of the invention, there is provided a method of transferring data from a first data processing platform to a second data processing platform, which is communicatively coupled to the first data processing platform, comprising the steps of: specifying, by the second data processing platform, a transfer unit size; and transferring, by the first data processing platform, the data in successive blocks which have a size less than or substantially equal to the specified transfer unit size and which are transmitted less than or substantially at a predetermined rate." (column 3, lines 49-58)

"Network congestion is limited by regulating the data transfer based on a rate-control parameter. In order to accommodate widely varying capabilities of clients, the requesting client specifies the maximum PDU size and PDU rate in the data request." (column 4, lines 25-29)

"A request for one or many files, in whole or in part, is sent from a particular client 14 to the server 12. The request is identified by a client-unique transaction ID. The request specifies not only the file(s) to be downloaded, but also includes information that tells the server 12 how the file is to be delivered. This includes the maximum size of an individual data packet and the maximum rate at which the packets can be

processed. This is to accommodate a wide range of client configurations. The server 12, upon receiving a request, may further reduce the size and rate of data packets that will be used for the transfer, depending on the current loads of both the server 12 and the network 10. The server 12 then schedules the request and begins transmitting sequential data packets, containing the client-unique transaction ID, at the appropriate rate." (column 5, lines 35-49)

At least in view of these teachings, Miller clearly discloses a speed indication signal that comprises an indicated speed of transmission representing a maximum transmission rate to be used in transmitting a specified data item.

The Applicant further argues that Miller fails to teach or suggest transmitting the specified data item from the server to the requesting computer wherein the transmitting comprising limiting, by the server, an average rate of transmission while sending at least a portion of the specified data item across a data link from the server to the requesting computer to be not greater than the maximum transmission rate indicated within the speed indication signal received from the requesting computer. Again, in view of the teachings of Miller, the Examiner submits that the Applicant's arguments are unpersuasive.

Art Unit: 2143

In addition to the above disclosures, Miller further discloses:

"It is acceptable for the server 12 to service a download at a lower rate than requested, and this may occur during periods of overload, but care must be taken that the inter-PDU delay for a particular download is never less than the client specified time." (column 11, lines 61-65)

Therefore, Miller clearly discloses this limitation.

Regarding claims 2, 7, and 12, the Applicant argues that Miller fails to teach or suggest determining at the server in response to receiving the speed indication signal a block size and a period based on at least the indicated speed of transmission wherein the period is longer than the period required to transmit the block size at the data rate of the data link. The Examiner respectfully does not agree. First, the limitation regarding the period merely recites that the period never exceeds the capacity of the data link. As shown above, Miller clearly discloses this limitation. Further, such a limitation is inherent within the teachings of Miller and as is known in the prior art since the period cannot be any shorter than the capacity of the data link in ANY case. Any such situation wherein period is shorter than the period required to transmit the block size at the data rate of the data link would

exceed the capacity of the data link which is <u>impossible in a</u> conventional data transmission system. Therefore, Miller also inherently discloses this limitation.

The Applicant further argues that the "delay" as described in Miller is not the same as the "period" as claimed. The Applicant asserts that "Miller never discusses the time required to send the data packets" (page 11 of the currently filed response). The Examiner traverses this assertion. As is known to those of ordinary skill, when a packet is sent, there is some period of time between sending of the next data packet which is described in Miller as being the "delay" between sending of packets. However, it is also inherent that there is some period of time from when the server sends the packet to when the client receives the packet. This concept is well known in the art as the "latency" or "lag" of the network. While Miller does not expressly disclose and/or discuss the concept of "lag", Miller does discuss "network congestion" throughout the disclosure. The Applicant corroborates these statements by remarking that "The 'period' of the presently claimed invention corresponds to the 'delay' of Miller and the time required to send the data packet with the specified size." (page 11) Therefore, the Applicant's recited "period" is the "delay" of Miller plus the inherent lag of the network as admitted by the Applicant. As explained, this

"period" is inherently taught in Miller. The rate at which the requesting computer or client receives such data is the real requested data rate that the client receives the data which includes any network congestion time period or "lag" of the network.

The Examiner asserts that such "latency" or "lag" inherently exists in any and all conventional network data transmission systems. If the Applicant traverses the Examiner's assertion, the Examiner will produce substantial evidence supporting this assertion.

Therefore, the Examiner submits that, in view of the teachings of Miller and the knowledge of one of ordinary skill in the art, Miller inherently discloses the Applicant's claimed "period".

The Applicant argues that Miller fails to teach or suggest adjusting the average rate of transmission while continuing the transmitting the specified data item. This argument is moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Art Unit: 2143

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 4, 6-7, 9, 11-12, 14, and 16-18 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6 014 707 A to Miller et al.

Regarding claim 1, Miller discloses a communication method for limiting transmission rate of data being transmitted from a server to a requesting computer (referred to within Miller as "client"), said method comprising steps of:

receiving, at a server from a requesting computer, a request for a specified data item ("DownloadStart" message; see column 7, lines 4-34 of Miller), the specified data item to be delivered in its entirety prior to being accessed by the requesting computer;

receiving, at the server from the requesting computer, in conjunction with receiving the request for the specified data item, a speed indication signal ("delay" field within the "DownloadStart" message; column 7, lines 28-29) that comprises an indicated speed of transmission specifying a maximum

Art Unit: 2143

transmission rate to be used in transmitting the specified data item from the server to the requesting computer; and

transmitting the specified data item from the server to the requesting computer, the transmitting comprising limiting, by the server, an average rate of transmission while sending at least a portion of the specified data item across a data link from the server to the requesting computer to be not greater than the maximum transmission rate represented within the speed indication signal received from the requesting computer, wherein the maximum transmission rate is less than the data rate of the data link and less than the data rate capacity of the requesting computer. (column 2, lines 32-41; column 2, line 63-column 3, line 1; column 5, lines 34-50; column 8, lines 6-21; column 11, lines 61-65)

Regarding claim 2, Miller discloses a communication method according to claim 1 in which the transmitting step comprises substeps of:

determining, at the server in response to receiving the speed indication signal, a block size based at least on the indicated speed of transmission; determining, at the server in response to receiving the speed indication signal, a period based at least on the indicated speed of transmission, wherein the period is longer than the period required to transmit the

Art Unit: 2143

block size at the data rate of the data link; and transmitting, from the server in response to receiving the speed indication signal, a plurality of blocks of data, each of the blocks having the block size and being transmitted at intervals substantially equal to the period. (column 10, lines 24-36; column 10, line 53-column 11, line 9)

Regarding claim 4, Miller discloses a communication method according to claim 1 further comprising steps of reading the specified data item from a memory associated with the server.

(column 9, line 56-column 10, line 11)

Claims 6-7, 9, 11-12, and 14 are also rejected since claims 6-7 and 9 recite a communication system and claims 11-12 and 14 recite a computer readable medium that contain substantially the same limitations as recited in claims 1-2 and 4 respectively.

Regarding claim 16, Miller discloses the method according to claim 1, wherein the indicated speed is not related to a speed that is associated with the specific data item. ("Maximum rate at which packets can be processed"; column 5, lines 34-49, specifically lines 41-42)

Claims 17 and 18 are also rejected since these claims recite substantially the same limitations as recited in claim 16.

Art Unit: 2143

Regarding claim 20, Miller discloses the method according to claim 1, wherein the maximum transmission rate comprises a specification of a maximum data transmission rate. (column 2, lines 32-41; column 2, line 63-column 3, line 1; column 5, lines 34-50; column 8, lines 6-21; column 11, lines 61-65)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere*Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a),

Art Unit: 2143

the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 3, 8, 13, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller in view of US Patent 5,991,810 to Shapiro et al.

Regarding claim 3, Miller discloses a communication method according to claim 1.

Miller does not disclose wherein the method further comprises the steps of accessing a remote computer indicated in an address included in the request, wherein the remote computer is not one of the server and the requesting computer and receiving, at the server, the specified data item from the remote computer, however, Shapiro does disclose these limitations (column 1, lines 25-44).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings

of these references since Shapiro discloses that using a server to access a remote computer to receive a specified data item allows the server to process a requesting computer's request for specified data items without the requesting computer having to make a specific connection to the remote computer (column 1, lines 30-33). In view of these specific advantages and that the references are directed to sending specified data items to a requesting computer, one of ordinary skill would have been motivated to combine these references and would have considered them to be analogous to one another based on their related fields of endeavor, which would lead one of ordinary skill to reasonably expect a successful combination of the teachings.

Claims 8 and 13 are also rejected since these claims recite substantially the same limitations as recited in claim 3.

Regarding claim 21, Miller and Shapiro disclose the method according to claim 3.

Miller and Shapiro do not expressly disclose wherein the server is a dialup server, however, the Applicant admits that the use of a dialup server is within the knowledge of one of ordinary skill in the art by its use by Internet service providers and that the dialup server is used in interactions with a client (see page 2 of the specification). This knowledge of one of ordinary skill in the art regarding dialup servers

Art Unit: 2143

would have suggested to one of ordinary skill in the art to modify the teachings of Miller and Shapiro to use a dialup server in place of the servers disclosed in Miller and Shapiro. Therefore, it would have been obvious to one of ordinary skill to achieve the claimed invention.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miller in view of US Patent 5,167,035 to Mann et al.

Regarding claim 19, Miller discloses the method according to claim 1, further comprising:

receiving at the server, from the requesting computer, a new speed indication signal contains a new indicated speed, the new speed indication signal being received subsequently to the receiving the request; and adjusting, in response to receiving the new speed indication signal, the average rate of transmission to be not greater than the new indicated speed contained within the new speed indication signal, wherein the new indicated speed is less than the data rate of the data link and less than the data rate capacity of the requesting computer. (column 6, lines 4-8; see also references as shown in claim 1)

Miller does not expressly disclose receiving the new speed indication signal during the transmitting the specified data item and adjusting the average rate of transmission while

Art Unit: 2143

continuing the transmitting of the specified data item, however, Mann does disclose this limitation (column 5, line 53-column 6, line 27, specifically column 5, line 9-21)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of these references since Mann discloses that using a new speed indication signal during the transmission of a specified data item allows the rate at which the data is sent to be dynamically altered to accommodate the dynamics of the data link (column 6, lines 22-27). In view of these specific advantages and that the references are directed to using speed indication signals to set the rate at which data is sent between a client and a server, one of ordinary skill would have been motivated to combine these references and would have considered them to be analogous to one another based on their related fields of endeavor, which would lead one of ordinary skill to reasonably expect a successful combination of the teachings.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George C. Neurauter, Jr. whose telephone number is 571-272-3918. The examiner can normally be reached on Monday-Friday 9am-5:30pm.

Art Unit: 2143

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley, can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

George C. Neurauter, Jr.

Patent Examiner

Art Unit 2143